



## **WATER RESOURCES RESEARCH GRANT PROPOSAL**

**Project ID:** 2004VI18B

**Title:** Hydrology Modeling in Turpentine Run, St. Thomas

**Project Type:** Research

**Focus Categories:** Hydrology, Non Point Pollution, Water Quality

**Keywords:** Hydrology Modeling, Nonpoint Source Pollution

**Start Date:** 03/01/2004

**End Date:** 02/28/2005

**Federal Funds Requested:** \$30,206

**Non-Federal Matching Funds Requested:** \$0

**Congressional District:** VI

**Principal Investigators:**

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**Abstract**

This project seeks to develop a detailed hydrologic model for the Turpentine Run watershed located on St. Thomas, US Virgin Islands. Turpentine Run may be an important source of land based nutrient, sediment, and bacterial pollution from nonpoint sources to the Brenner Bay and Mangrove Lagoon marine systems. The importance of this watershed as a pollution source is difficult to assess, however, without an accurate hydrologic model. The development of a hydrology model for the Turpentine Run watershed will enable future research and assessment of contaminant transport and loading into these important marine systems. Model development will take into account the spatial variability of rainfall and the transient nature of pulsed flow in the Turpentine Run Gut system, by employing rainfall and water level monitoring equipment with data logging capabilities at four appropriate locations within the watershed study area.